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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,619	01/30/2001	Steven J. Alt	1-36021	3016
4859	7590	05/05/2004	EXAMINER	
MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619			BALSIS, SHAY L	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AC

Office Action Summary

Application No.

09/772,619

Applicant(s)

ALT, STEVEN J.

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 7-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4, 7-8, 11-12 and 16-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Kamada (USPN 5720073) in view of Sacks (USPN 5245724) or Kamada (USPN 5720073) in view of Rivin et al. (USPN 6003193) or Kamada (USPN 5720073) in view of Ritzenthaler (USPN 5704341).

Kamada teaches a mop bucket (80) and wringer apparatus (10) for wringing liquid from a mop. The wringer has an upwardly opening for receiving a mop and is defined by front, rear and side (50a, 50b) walls. There are passageways that are on some of the walls to allow liquid to pass through (figure 9). There is a rack (30) which pressure jaws (40) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is provided with slots (56a, 56b) for vertically guiding the rack. A pinion (20) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastic spring means (76) is attached to the at least one of the side walls and the pinion, tensioned to urge the pinion in a position to cause the pressure jaws to be moved away from each other. The rear wall of the wringer has a handle (14) attached thereto to which movement of the handle starting the wringing process. The front wall of the bucket has a curved portion allowing for easy pouring. When the wringer is placed on three sides of the bucket a seal is formed preventing any leaking of liquid.

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Kamada teaches all the essential elements of the claimed invention however fails to teach that the spring is an elastomer.

Sacks teaches an apparatus for wringing mops that comprises an elastomeric plastic material as the biasing means. Sacks also teaches that the biasing means may be in the form of coil springs (col. 9, lines 49-54). Sacks and Kamada are analogous art because they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Kamada and use an elastomer as taught by Sacks. Sacks teaches that an elastomer or a spring means could be used. The suggestion for doing so would be that both an elastomer and a spring have the same ability to resume its original shape when a force is removed. Therefore it would have been obvious to combine Sacks with Kamada to obtain the invention as specified in claims 1, 18 and 19.

Rivin et al. teaches a clutch comprising a coiled spring to allow movement between the shaft and gear. Another embodiment may comprise an elastomeric member as the biasing means (abstract). Rivin and Kamada are analogous art because they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Kamada and use an elastomer as taught by Rivin. Rivin teaches that an elastomer or a spring means could be used. The suggestion for doing so would be that both an elastomer and a spring have the same ability to resume its original shape when a force is removed. Therefore it would have been obvious to combine Rivin with Kamada to obtain the invention as specified in claims 1, 18 and 19.

Ritzenthaler teaches a tension band for trap machines. Ritzenthaler teaches that elastomer tension bands are used in lieu of a spring (abstract). Ritzenthaler and Kamada are analogous art

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because they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Kamada and use an elastomer as taught by Ritzenthaler. Ritzenthaler teaches that an elastomer or a spring means could be used, however, the springs lead to fatigue and are subject to breaking. Therefore, an elastomer band is preferred. Therefore it would have been obvious to combine Ritzenthaler with Kamada to obtain the invention as specified in claims 1, 18 and 19.

4. Claims 1, 4, 7-8, 11, 14 and 16-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Bard (USPN 2199906) in view of Sacks (USPN 5245724) or Bard (USPN 2199906) in view of Rivin et al. (USPN 6003193) or Bard (USPN 2199906) in view of Ritzenthaler (USPN 5704341).

Bard teaches a mop bucket and wringer apparatus for wringing liquid from a mop (col. 3, lines 12-17). The wringer has an upwardly opening for receiving a mop and is defined by front, rear and side walls (figure 1). There are passageways that are on some of the walls to allow liquid to pass through (figure 1). There is a rack (19) which pressure jaws (16) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is provided with slots (14) for vertically guiding the rack. A pinion (24) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastic spring means (26) is attached to the at least one of the side walls and the pinion, tensioned to urge the pinion in a position to cause the pressure jaws to be moved away from each other. The rear wall of the wringer has a handle (25) attached thereto to which movement of the handle starting the wringing process. The bottom wall of the wringer is of the stepped configuration (figure 1, element 11). When the wringer is placed on three sides of the bucket a seal is formed preventing any leaking of liquid. Bard

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teaches all the essential elements of the claimed invention however fails to teach that the spring is elastomeric.

Sacks teaches an apparatus for wringing mops that comprises an elastomeric plastic material as the biasing means. Sacks also teaches that the biasing means may be in the form of coil springs (col. 9, lines 49-54). Sacks and Bard are analogous art because they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Bard and use an elastomer as taught by Sacks. Sacks teaches that an elastomer or a spring means could be used. The suggestion for doing so would be that both an elastomer and a spring have the same ability to resume its original shape when a force is removed. Therefore it would have been obvious to combine Sacks with Bard to obtain the invention as specified in claims 1, 18 and 19.

Rivin et al. teaches a clutch comprising a coiled spring to allow movement between the shaft and gear. Another embodiment may comprise an elastomeric member as the biasing means (abstract). Rivin and Bard are analogous art because they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Bard and use an elastomer as taught by Rivin. Rivin teaches that an elastomer or a spring means could be used. The suggestion for doing so would be that both an elastomer and a spring have the same ability to resume its original shape when a force is removed. Therefore it would have been obvious to combine Rivin with Bard to obtain the invention as specified in claims 1, 18 and 19.

Ritzenthaler teaches a tension band for trap machines. Ritzenthaler teaches that elastomer tension bands are used in lieu of a spring (abstract). Ritzenthaler and Bard are analogous art because

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they are from the same field of endeavor of using an elastic member that regains its original shape after being compressed or tensioned. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Bard and use an elastomer as taught by Ritzenthaler. Ritzenthaler teaches that an elastomer or a spring means could be used, however, the springs lead to fatigue and are subject to breaking. Therefore, an elastomer band is preferred. Therefore it would have been obvious to combine Ritzenthaler with Bard to obtain the invention as specified in claims 1, 18 and 19.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1) Taylor (USPN 5333353) in view of Kamada (USPN 5720073) and in further view of Sacks (USPN 5246724) or 2) Taylor (USPN 5333353) in view of Kamada (USPN 5720073) and in further view of Rivin et al. (USPN 6003193) or 3) Taylor (USPN 5333353) in view of Kamada (USPN 5720073) and in further view of Ritzenthaler (USPN 5704341).

Taylor teaches a mop wringer and bucket device, wherein the bucket is provided with slots (82) for guiding the vertical movement of the wringer with respect to the mop bucket. The wringer has downwardly extending extensions (80) that are to be received within the slots. The bucket also includes a handle (figure 12) and a curved portion (76) forming a pouring spout. The handle may be used to attach the device to a toilet or a sink basin. The bucket also includes a stepped bottom wall (66) and side walls with corners (figure 12). The wringer sits on three sides of the bucket thus forming a seal to prevent any liquid from leaking. Taylor teaches all the essential elements of the claimed invention however, Taylor fails to teach the specifics of the wringer. After examining Taylor's figures closely it can be seen that the wringer used comprises pressure jaws and vertical slots to guide the pressure jaws (figure 10). Kamada in view of Sacks and Kamada in view of Rivin and Kamada in view of Ritzenthaler all teach a wringer having an upwardly opening for receiving a

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mop and is defined by front, rear and side (50a, 50b) walls. There are passageways that are on some of the walls to allow liquid to pass through (figure 9). There is a rack (30) which pressure jaws (40) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is provided with slots (56a, 56b) for vertically guiding the rack. A pinion (20) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastomer spring means (76) is attached to the at least one of the side walls and the pinion, tensioned to urge the pinion in a position to cause the pressure jaws to be moved away from each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the wringer as taught by Kamada in view of Sacks or Kamada in view of Rivin or Kamada in view of Ritzenthaler in place of the wringer disclosed in Taylor, since it appears from the figures that the Taylor's wringer functions and is configured in essentially the same manner as Kamada in view of Sacks or Kamada in view of Rivin or Kamada in view of Ritzenthaler.

Additionally, Kamada in view of Sacks' or Kamada in view of Rivin's or Kamada in view of Ritzenthaler's wringer has an increased force from the pressure jaws to thoroughly squeeze liquid from the mop head.

6. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1) Taylor (USPN 5333353) in view of Bard (USPN 2199906) and in further view of Sacks (USPN 5246724) or 2) Taylor (USPN 5333353) in view of Bard (USPN 2199906) and in further view of Rivin et al. (USPN 6003193) or 3) Taylor (USPN 5333353) in view of Bard (USPN 2199906) and further in view of Ritzenthaler (USPN 5704341).

Taylor teaches a mop wringer and bucket device, wherein the bucket is provided with slots (82) for guiding the vertical movement of the wringer with respect to the mop bucket. The wringer

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has downwardly extending extensions (80) that are to be received within the slots. The bucket also includes a handle (figure 12) and a curved portion (76) forming a pouring spout. The handle may be used to attach the device to a toilet or a sink basin. The bucket also includes a stepped bottom wall (66) and side walls with corners (figure 12). The wringer sits on three sides of the bucket thus forming a seal to prevent any liquid from leaking. Taylor teaches all the essential elements of the claimed invention however, Taylor fails to teach the specifics of the wringer. After examining Taylor's figures closely it can be seen that the wringer used comprises pressure jaws and vertical slots to guide the pressure jaws (figure 10). Bard in view of Sacks or Bard in view of Rivin or Bard in view of Ritzenthaler all teach a wringer having an upwardly opening for receiving a mop and is defined by front, rear and side walls (figure 1). There are passageways that are on some of the walls to allow liquid to pass through (figure 1). There is a rack (19) which pressure jaws (16) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is provided with slots (14) for vertically guiding the rack. A pinion (24) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastomer spring means (26) is attached to the at least one of the side walls and the pinion tensioned to urge the pinion in a position to cause the pressure jaws to be moved away from each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the wringer as taught by Bard in view of Sacks or Bard in view of Rivin or Bard in view of Ritzenthaler in place of the wringer disclosed in Taylor, since it appears from the figures that the Taylor's wringer functions and is configured in essentially the same manner as Bard in view of Sacks or Bard in view of Rivin or Bard in view of Ritzenthaler. Additionally, Bard in view of Sacks' or

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Bard in view of Rivin's or Bard in view of Ritzenthaler's wringer ensures that the pressure jaws will remain in alignment and will act in a continuously smooth manner.

Response to Arguments

Applicant states that Sacks teaches an elastomeric member that is in compression and not tension. While this is true, the rejection was not made based the fact that the elastomer was in compression or tension. The rejection was made to show that it has been known in the art to replace springs with elastomers since both have the same characteristic of returning to original shape after a force have been removed. Sacks clearly teaches that elastomers can be used in place of springs (col. 9, lines 49-54). Therefore the fact that the elastomer of Sacks is in compression has no bearing on the rejection, since the rejection was solely made to show that both springs and elastomers possess the same characteristics of resuming original shape.

Applicant states that Rivin is non-analogous art since it deals with windshield wiper mechanisms. Rivin does deal with windshield wipers however, Rivin is considered to be analogous art because it teaches replacing a spring with an elastomer. Examiner is just using the reference to show that springs can be interchangeable with elastomers and vice versa. So while the reference is not from the same environment as Kamada or Bard, it is solely being used to demonstrate that it is known to use elastomers in lieu of springs.

New reference Ritzenthaler is also not from the same environment as a mop wringer however again, the reference is being used to show that elastomers and springs are known to be interchangeable.

Sacks, Rivin and Ritzenthaler all teach a spring component that can be replaced by an elastomer. According to dictionary.com, a spring is an elastic device that regains its original shape after being compressed or extended and an elastomer is an elastic material that resumes its shape

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when a deforming force is removed. Both a spring and elastomer comprise the same characteristics and therefore, as shown by Sacks, Rivin and Ritzenthaler it is known to replace one with the other.

Conclusion

Applicant's amendment, including the limitations that the elastomer is in tension, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

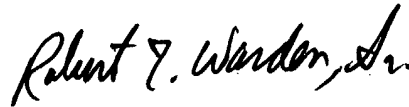
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb
4/20/04



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